# Rhododendron



Rhododendron Leaf

Rhododendron Stem

Rhododendron Flower

(Rhododendron ponticum)

Common Names: Rhododendron, Common rhododendron, Pontic rhododendron,

Family: Ericaceae

### Status in Ireland

Rhododendron ponticum is classified as a highly invasive species in Ireland. It poses a significant threat to native biodiversity due to its ability to dominate and alter natural habitats.

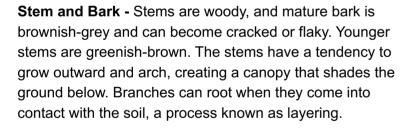
### **Description / Profile**

Rhododendron is an invasive evergreen shrub that poses a major threat to Ireland's natural ecosystems. The plant's ability to thrive in both shaded and disturbed environments makes it highly adaptable to these settings. However, its spread in these areas poses challenges for managing its invasive potential especially where it can act as a source of further infestation into nearby natural habitats. Controlling Rhododendron ponticum near infrastructure often involves mechanical removal, herbicide treatments, and ongoing monitoring to prevent regrowth and protect surrounding ecosystems.



Rhododendron can grow to over 5 metres in height.

**Leaves -** Are oblong or elliptical, measuring between 6 to 18 cm in length and 3 to 5 cm in width, with a pointed tip and a slightly curved, tapering base. are dark green and glossy on the upper surface, while the underside is paler and can have a slightly leathery texture. Leaves are arranged in an alternate pattern along the stems, with clusters of leaves often found at the ends of branches.



Flowers - Are typically bell-shaped or funnel-shaped and grow in large clusters called trusses. Each truss can contain 8-20 individual flowers, creating a showy display. Flowers are vibrant purple or pinkish-purple, often with darker purple or reddish spots inside the throat. Individual flowers are about 4-6 cm in diameter, with five petals that flare outward and may have a slightly wavy or ruffled edge.

**Seeds -** Each plant can produce thousands of seeds that are dispersed by wind, enabling rapid colonisation of new areas. The seeds are tiny, typically around 1-2 mm in length, and light brown in colour. They are elongated and have a slightly winged appearance, which aids in wind dispersal.

Roots - Shallow but extensive root system, making it wellsuited to establishing in a variety of soil types, especially acidic soils. The roots are numerous, thin, and fibrous, forming a dense mat that allows the plant to compete effectively with other vegetation for resources. The plant can spread vegetatively through layering, where branches that come into contact with the ground form roots and establish new plants.

### Habitat

Rhododendron is native to regions of southern Europe and Asia but has become widely naturalised in western Europe, including Ireland. It is commonly found in:

- Woodlands and Forests: Particularly in acidic, damp soils. It thrives in shaded environments and can form dense thickets that outcompete native vegetation.
- Heathlands and Moorlands: It can establish itself in these habitats, where its ability to tolerate poor soils allows it to spread.
- Gardens and Estates: Originally introduced as an ornamental plant, it is still found in some gardens, parks, and large estates, where it can spread into surrounding wild areas.

In addition to seeds, Rhododendron can also spread through layering, where branches touching the ground form roots and create new plants.

### Control & Management

Effective management requires a combination of herbicide application, mechanical removal, and careful monitoring, particularly in sensitive or protected

**Note:** Herbicide use near watercourses requires special permission from the local council or the Environmental Protection Agency (EPA).

Herbicide treatment (such as our Green Matters™ foam treatment) - is the most effective method, particularly when applied in late summer/early autumn when the plant is storing energy in its roots. If near watercourses, use only aquatic-approved herbicides to prevent contamination and consider stem / stump technique for a more precise application. Maintain a buffer zone (at least 10 metres) and avoid herbicide run-off.

**Growth Stage** - Use appropriate herbicide formulations depending on the growth stage, example, in early growth (spring), full height (summer), flowering (late summer), or dying back (autumn/winter).

### **Mechanical Control**

Excavation - mechanical removal can be effective and can be conducted all year round but must be done carefully to ensure all roots are removed.

S.O.S.™ - JKC soil screening service is an option to reduce costs. Screened soils can be re-used on site to minimising materials requiring disposal.

Manual Removal - For small infestations, manual removal of plants, including roots, can be effective. Ensure all root fragments and seeds are removed to prevent regrowth.

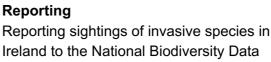
**Treatment Bund** - If there is space on the site, a treatment bund can be considered. Vector material should be placed in a prepared bund that is lined with root barrier and monitored / treated until new growth is completely suppressed.

Root Barriers - Barriers can be installed to prevent the spread of roots into adjacent properties. Installing root barriers can help contain the spread of roots, particularly near infrastructure or sensitive areas.

# Herbicide Treatment Timetable for Rhododendron

Month	Treatment	Herbicide Type	Herbicide Rate	Considerations
March - April	Early Growth Stage Foliar Application	Glyphosate-based herbicide (e.g., Roundup ProActive)	5-6 L/ha of 360g/L formulation	Apply to young plants or regrowth when leaves are actively growing. Ensure thorough coverage. Avoid spraying on windy days to minimise drift.
May - June	Cut & Spray Method	Glyphosate or Triclopyr (e.g., Garlon 4)	10-15 ml of 360g/L solution per cut stump	Cut larger shrubs close to the ground and immediately apply herbicide to cut stumps. Effective for mature stands. Avoid spraying during flowering.
July - August	Stem Injection or Cut & Paint Method	Glyphosate or Triclopyr	20 ml of 360g/L solution per stem or cut stump	Drill or cut stems and inject herbicide directly into the hollow stem or apply to cut surfaces. Suitable for dense infestations or sensitive areas.
September - October	Late Season Foliar Application	Glyphosate	5-6 L/ha	Apply to any regrowth or seedlings before plants enter dormancy. This is the most effective period as the plant translocates nutrients to the roots.
November - February	Physical Removal & Site Maintenance	N/A	N/A	Remove dead plants, roots, and debris. Monitor for regrowth and follow up as needed. Avoid soil disturbance to prevent spreading seeds and roots.

Rhododendron



Centre and/or the relevant local authority.

https://records.biodiversityireland.ie/start -recording.

### **Monitoring and Maintenance**

Regular monitoring of the site is essential, particularly after initial treatment or excavation. Plan for follow-up inspections of treated / excavated areas for at least 2-3 years to check for regrowth or new infestations.

### This map shows the current (2024) distribution of Rhododendron in Ireland, recorded by the National Biodiversity Data Centre

N.B. This Species Identification Guide is intended to outline the key identification factors and treatment options only and should not be used as a definitive method for species ID. Legislation and its interpretation is constantly

Optimal Survey

Sub-optimal Survey

toO

Rhododendron Survey

Sub-optimal Treatment

Optimal Treatment

evolving. A variety of other IAPS may be encountered, which may require specific survey and mitigation. Please contact Japanese Knotweed Control Ltd (mail@jkc.ie) for the latest position & advice.

# **Environmental Considerations**

Herbicide Handling - Use PPE, including gloves, goggles, and long-sleeved clothing. Avoid skin and eye contact and inhalation. Follow all safety instructions on

Herbicide Application Method - Use foliar spraying for large infestations and stump / stem method for smaller stands or in sensitive areas. Ensure accurate calibration of spraying equipment to avoid over-application.

**Weather Conditions** - Apply during calm, dry conditions to minimise drift. Avoid application during heavy rainfall or when rain is forecast within 6 hours to reduce run-off.

> Storage & Disposal - Store herbicides securely in a dry, wellventilated area away from water sources. Dispose of containers and unused herbicides according to local regulations to prevent environmental contamination.

> > **Watercourses** - Rhododendron can spread easily along rivers and streams in Ireland, where water can carry seeds downstream.

Soil Movement - Soil movement or excavation might cause further spread, such as during construction

**Proximity to Infrastructure** - Rhododendron is often found along roadsides, where seeds can be dispersed by wind or vehicles. Its presence along verges and embankments can cause reduced visibility and may require management for road safety. The plant can colonise railway embankments and other disturbed areas, where it can spread rapidly. In Urban and Suburban areas it can establish in

green spaces within towns and cities, especially in unmanaged land.

Legal Requirements - Rhododendron is included in European Communities (Birds and Natural Habitats) Regulations 2011. It is listed as a species whose introduction, dispersal, and keeping are restricted. The regulation requires landowners and managers to control its spread and prevent it from spreading into natural habitats.

# Safety Protocols

Herbicide Handling - Use PPE, including gloves, goggles, face mask and long-sleeved clothing, Coveralls. Avoid skin and eye contact and inhalation.













Follow all safety instructions on herbicide labels. If the infestation is in a public area, signage may be required to warn the public and prevent soil disturbance.

# **On-site Biosecurity Measures**

Prevent Spread - Avoid disturbing the plant unnecessarily, as seeds / root fragments can easily spread and establish new colonies. Remove and bag all cut material for proper disposal.

**Equipment Cleanliness -** Clean all tools, equipment, footwear, and clothing before leaving the site to prevent the spread of roots and plant material.

**Transport of Plant Material -** Transport all plant material in sealed containers to an authorised disposal site.

Do not compost or leave on-site, as this can lead to further spread.

**Monitoring & Follow-Up** - Regular monitoring of the site is essential, particularly after initial treatment or excavation.

Plan for follow-up inspections of treated / excavated areas for at least 2-3 years to check for regrowth or new infestations.

Follow-up treatments may be necessary for several years due to the persistent nature of the root system.

# Long-Term Management

**Site Rehabilitation -** Following successful control, implement a long-term monitoring and rehabilitation plan to restore native vegetation and prevent reinvasion.

**Re-vegetation** - Replant treated areas with native species to restore ecological balance and prevent re-invasion by Rhododendron.

Community Engagement - Engage local communities in identification and reporting of infestations. Educate on its ecological impacts and promote the use of native alternatives for landscaping.

> For further information and free advice, please contact: **Japanese Knotweed Control Ltd.**

> > Email: mail@jkc.ie Tel: +353 (0)86 250 8805 Web: www.jkc.ie



